a) selecting at least one magnetic resonance parameter to characterize a body part, organ or tissue,

b) selecting a suitable pulse sequence to calculate and quantify that selected magnetic resonance parameter,

c) using the selected pulse sequence, acquiring multiple sets of magnetic resonance signals from the body part, organ or tissue at an unchanged position relative to the measurement acquisition system,

d) calculating and quantifying the magnetic resonance imaging parameters on a pixel by pixel basis,

e) determining biological properties of interest of a body part, organ or tissue structure by biological means including histological, biochemical, histochemical, and biomechanical, and

f) correlating quantitative ranges of the selected magnetic resonance parameters with selected biological properties of interest of a body party, organ or tissue.

4. (Amended) The method as defined by claim 3 and further including the step of:

f) creating a color image of the tissue based on representation of sets of one or more quantitative magnetic resonance parameters.

5. (Amended) The method as defined by claim 1 and further including the step of:

f) creating a color image based on representation of sets of one or more quantitative magnetic resonance parameters.

6. (Amended) A method for analyzing tissue based on quantized magnetic resonance data comprising the steps of

a) acquiring magnetic resonance signals from the tissue,

b) determining at least one magnetic resonance quality of tissue in each pixel,

c) calculating and quantifying the magnetic resonance quality from the magnetic resonance signals pixel by pixel within the tissue, and

d) correlating the determined magnetic resonance quality with known magnetic resonance qualities of tissue.

9. (Amended) The method as defined by claim 8 and further including the step of:

d) creating a color image of the tissue based on the determined magnetic resonance quality.

10. (Amended) The method as defined by claim 6 and further including the step of:

d) creating a color image of the tissue based on the determined magnetic resonance quality.

11. (Amended) Magnetic resonance apparatus for use in analyzing a body comprising:

a) means for establishing a magnetic field through the body,

b) means for exciting nuclei spins in the body with an RF signal oriented at an angle with respect to said magnetic field,

c) means for receiving magnetic resonance signals from the excited nuclei representative of said nuclei spins,

d) means b) and c) cooperatively obtaining a multiplicity of sets of magnetic resonance signals and calculating a magnetic resonance quality from the body, and

e) means for quantifying the magnetic resonance quality pixel by pixel within the body.

13. (Amended) Apparatus as defined by claim 12 wherein means b) and means c) utilize pulse echo sequences with varying echo times.

14. (Amended) Apparatus as defined by claim 11 wherein the magnetic resonance quality is chosen from T1 relaxation time, T2 relaxation time, and magnetic ratio.

15. (Amended) Apparatus as defined by claim 11 and further including

f) a display for color imaging the magnetic resonance qualities pixel by pixel.

16 (New) The method as defined by claim 1 wherein step d) includes preparing a histogram plot of the frequency distribution of the parameter.

17. (New) Apparatus as defined by claim 11 wherein means e) prepares a histogram plot of the frequency distribution of the parameter.